

AMENDMENT UNDER 37 CFR § 1.111
Serial No. 09/489,929

REMARKS

A total of 54 claims remain in the present application. Reconsideration of this application is requested.

Referring now to the text of the Office Action:

- claims 1-9, 13-18, 21-29, 33-38, 41-47 and 49-52 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over the teaching of United States Patent No. 5,383,221 (Akita et al.) in view of United States Patent No. 6,765,889 (Ludwig); and
- claims 10-12, 19-20, 30-32, 39-40, 48 and 53-54 are objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant appreciates the Examiner's indication of allowable subject matter in claims 10-12, 19-20, 30-32, 39-40, 48 and 53-54.

Rejections under 35 U.S.C. § 103(a)

At paragraph 2 of the detailed action, the Examiner asserts that "Akita et al. disclosed a method of controlling data traffic in a wireless communications network comprising a plurality of wireless terminals and base stations wherein the method having the steps of examining performance each wireless link to identify a poorly performing wireless link and temporarily interrupting the bi-directional data transmission over the poorly performing wireless link (col. 6/ln. 4-63)." The Examiner admits that Akita et al do not teach that the traffic control is implemented in the base station. However, the Examiner apparently finds this element in Ludwig et al, and concludes that "it would have been obvious to one of ordinary skill in the art to provide such method of data processing between devices of Ludwig to the communication system of Akita et al. in order to allow efficient handling of data transmission to effectively utilize resources for a zone, cell of a predetermined area within the network". For the reasons set forth below, this interpretation of the cited references is invalid, and the claim rejections based thereon cannot be sustained as a matter of law.

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As described at length in Applicant's response filed June 14, 2004, United States Patent No. 5,383,221 (Akita et al.) teaches a mobile station unit and channel switching method in which the mobile station monitors the quality of its link with the bases station. If the link quality deteriorates, the mobile station attempts to execute a "hand-off" procedure to establish a new link with another base station. As such, it is impossible to rationally assert that Akita et al. teaches or suggests the steps of "examining performance of each wireless link to identify a poorly performing wireless link", and "temporarily interrupting bi-directional data transmission over the poorly performing wireless link", as required by the present invention. More particularly:

- Akita et al monitors the performance of exactly one wireless link – its own. The mobile station unit of Akita et al is utterly incapable of monitoring each wireless link of the network, and Akita et al do not teach, suggest, or even remotely contemplate such operation.
- Akita et al responds to degraded link performance by attempting a hand-off procedure to a new base station. This hand-off attempt necessarily involves a brief interruption of reception of signals by the mobile unit. However, it is manifestly obvious that successful execution of the hand-off procedure is utterly dependent on (both) base stations continuing to transmit. Akita et al do not teach, suggest, or even remotely contemplate interruption of bi-directional transmission – if for no other reason than that any such transmission interruption defeats any attempted hand-off, and so destroys the method of Akita et al.

United States Patent No. 6,765,889 (Ludwig) does not supply the missing teachings.

In particular, Ludwig teaches a communication method and system, in which data packets that are lost or will be lost during transmission, due to a temporary interruption of the communication network, can be recovered. The system of Ludwig avoids the loss of data packets due to temporary interruptions of the communication network by determining, at the

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sending data processing device those packets that are, or will be lost, based on information received from the communication network. To allow retrieval of lost data packets, data packets scheduled for transmission can be temporarily stored in temporary storage devices. Transmission of packets, retransmission and other services needed for data communication can be performed by an appropriately modified TCP/IP protocol set.

Thus Ludwig teaches a data communications method that is tolerant of temporary communications interruptions. However, Ludwig does not teach or suggest deliberately creating interruptions. More particularly, Ludwig do not teach, suggest, or remotely contemplate either of the steps of "examining performance of each wireless link to identify a poorly performing wireless link", and "temporarily interrupting bi-directional data transmission over the poorly performing wireless link", as required by the present invention.

In light of the forgoing, neither of the Examiner's references teach or suggest the features of independent claims 1 and 21, and thus cannot sustain a claim rejection under 35 U.S.C. § 103(a). The dependent claims define further features of the invention, and thus are believed to provide still further grounds for patentability.

It is also worth noting that the Examiner's rejection under 35 U.S.C. § 103(a) is improper, for at least the reasons that: there is no "suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings"; and the Examiner's combination has no "reasonable expectation of success" .MPEP. § 703.02(j)

With respect to the first criterion, it will be noted that Akita et al. teaches a mobile unit which monitors the performance of its link with the base station, when the performance degrades, the mobile unit attempts to execute a hand-off procedure to establish a new link to another base station. Ludwig provides a method of recovering data packets that are or will be lost during transmission as a result of communications interruptions. While these systems may be implemented within the same network, they are entirely independent, and neither reference provides any motivation for combining them.

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With respect to the second criterion, it manifestly obvious that the Examiner's combination is inoperative, and therefore offers no reasonable opportunity for success. In particular, Akita et al teaches that the mobile unit monitors its wireless link with the base station, and attempt to execute a hand-off procedure to another base station if the link performance degrades. Implementing this in the base station, as suggested by the Examiner, results in a base station that monitors the performance of its wireless link with another base station, and attempts to execute a hand-off procedure to another base station if the link performance degrades. However, since wireless links between base stations are high-bandwidth fixed wireless links using narrow-beam antennas, the execution of a hand-off procedure of the type contemplated by Akita et al simply will not work. Other well known techniques are used in the art to address the problem of performance degradation of high-bandwidth fixed wireless links. Obviously, Akita et al teach a method and system that is operative only if it is implemented in the mobile station, and Akita et al do not suggest otherwise. Even if this were not the case, implementing the method of Akita et al in the base station would still not provide the features of the present invention, as discussed above, and so the Examiner's combination would still be unsuccessful.

In light of the foregoing, it is submitted that the presently claimed invention is clearly distinguishable over the teachings of the cited references, taken alone or in any combination. Thus it is believed that the present application is in condition for allowance, and early action in that respect is courteously solicited.

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If any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,


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